## 42b Kinesiology: AOIs Coxal and Tibiofemoral Joint Muscles

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| 10 minutes | Break Announce the return time and write it on the board. |
| :--- | :--- |
| 5 minutes | Attendance Also project the "Class Reminders" slide. |
| 20 minutes | Cadaver Video: Acland's DVD Atlas of Human Anatomy |
| 55 minutes | Anatomy in Clay |
| 20 minutes | Break Announce the return time and write it on the board. |
| 30 minutes | 42b Kinesiology Quiz |
| 60 minutes | Palpation |
| $\frac{10 \text { minutes }}{3 \mathrm{~h} 30 \mathrm{~m}}$ | Break down, clean up, and circle up |

# 42b Kinesiology: AOIs Coxal and Tibiofemoral Joint Muscles 

## Assignments:

- 43a Swedish: Outside Massages (Packet A: 57-62)


## Quizzes:

- 42b Kinesiology Quiz NOW!!
- (adductor magnus, gracilis, iliopsoas, sartorius, TFL, piriformis, quadratus femoris)
- 44a Quiz (33b, 37b, 41b, 42b, and 43a)


## Practical Exam:

- 44b Integration Massage: Practical Exam (60-minute Swedish, Passive Stretches, and BMTs)

Preparation for upcoming classes:

- 43a Kinesiology: Synergists - Coxal and Tibiofemoral Joint Muscles
- 47b, 48b, 49b Pregnancy Message: These classes cannot be made up in the make-up room. To schedule a sit-in, please contact the Student Administrator.


## Classmarker

## Grading your Quiz/Exam

- Classmarker will automatically grade your assignment and email you a copy of your completed test.
- Retakes. If you did not pass a test you may reserve space in the make-up room. If you are not making up hours, your time there will be at no cost. Retakes may be done at anytime before a student graduates. You may retake it for a grade up to a 70 . These are done on paper copies.
- Please refer to your assignment grid on pages A: 29-32.


## Cadaver Video

- Deep Lateral Rotators
- Adductors
- IT Tract, TFL, and Iliopsoas
- Sartorius


## Anatomy in Clay

- Coxal and tibiofemoral joint muscles that we've studied so far:
- Gluteus maximus
- Gluteus medius
- Gluteus minimus
- Biceps femoris
- Semitendinosus
- Semimembranosus
- Rectus femoris
- Vastus lateralis
- Vastus medialis
- Vastus intermedius
- Gastrocnemius
- Adductor magnus *
- Gracilis *
- Psoas major *
- Iliacus*
- Sartorius *
- Tensor fasciae latae *
- Piriformis *
- Quadratus femoris *


## Palpation

## Set Up by the Students

- Students form groups of 3 .
- Each group sets up a table and gets 1 face cradle, 1 bolster, and 2 chairs.
- Receivers must remain clothed.
- There will be no need of sheets except for a face cradle cover.


## Demo and Practice

- All of the students come to a central table to watch a brief demonstration of how to palpate one of the focus muscles:
- List and identify the bony landmarks, especially origins and insertions.
- List and identify the muscle bellies and tendons.
- List and explain the actions.
- Demo how to palpate the muscle while simultaneously offer resistance to the action, "Contract, relax. Contract, relax."
- The students go back to their table to practice the palpation.
- 2 students palpate the third student collaboratively.
- The instructor and assistant circulate to offer guidance and touch comparisons:
- This process repeats for each muscle that will be palpated.
- Once all the focus muscles have been palpated on the first student, repeat the process so that each student will palpate twice and be palpated once.


## Adductor Magnus, page 320

A All fibers:
Adduct the hip (coxal joint)
Medially rotate the hip (coxal joint)
Assist to flex the hip (coxal joint)

Posterior fibers:<br>Extend the hip (coxal joint)

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Inferior ramus of the pubis
Ramus of the ischium
Ischial tuberosity

Medial lip of linea aspera
Adductor tubercle


Posterior View

## Gracilis, page 321

A All fibers:
Adduct the hip (coxal joint)
Medially rotate the hip (coxal joint)
Flex the knee (tibiofemoral joint)
Medially rotate the knee (tibiofemoral joint)
( Inferior ramus of the pubis

I Proximal, medial shaft of tibia at pes anserinus tendon


Anterior View

Posterior View

## Psoas Major, page 332

A With the origin fixed:
Flex the hip (coxal joint)
May laterally rotate the hip (coxal joint)

With the insertion fixed:
Flex the trunk toward the thigh
Tilt the pelvis anteriorly

Unilaterally:
Assist to laterally flex the lumbar spine

O Bodies of lumbar vertebrae
Transverse processes of lumbar vertebrae

I Lesser trochanter


Anterior View

## Iliacus, page 332

A With the origin fixed:
Flex the hip (coxal joint)
May laterally rotate the hip (coxal joint)

With the insertion fixed:
Flex the trunk toward the thigh


Anterior View

Iliac fossa

I Lesser trochanter


## Sartorius, page 326

Flex the hip (coxal joint)
Laterally rotate the hip (coxal joint)
Abduct the hip (coxal joint)
Flex the knee (tibiofemoral joint)
Medially rotate the knee (tibiofemoral joint)

O Anterior superior iliac spine (ASIS)

I Proximal, medial shaft of the tibia at pes anserinus tendon


Anteromedial View

## Tensor Fasciae Latae, page 324

A Flex the hip (coxal joint)
Medially rotate the hip (coxal joint)
Abduct the hip (coxal joint)

Iliac crest, posterior to the ASIS

I Iliotibial tract


Lateral View

## Piriformis, page 328

A Laterally rotate the hip (coxal joint)
Abduct the hip (coxal joint) when it is flexed

O Anterior surface of sacrum

I Superior aspect of greater trochanter


Posterior View


## Quadratus Femoris, page 328

A Laterally rotate the hip (coxal joint)

Lateral border of ischial tuberosity

I Intertrochanteric crest, between the greater and lesser trochanters


Posterior View


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